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10/828,460	04/20/2004	Paul J. Garnett	5681-03702	3996

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EXAMINER

BUI, HUNG S

ART UNIT	PAPER NUMBER
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2841

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/828,460

Applicant(s)

GARNETT ET AL.

Examiner

Hung S. Bui

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 72-77 and 79-96 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 72-77 and 79-96 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 72-77, 80-81 and 86-96 are rejected under 35 U.S.C. 102(b) as being anticipated by Gallagher et al. [US 5,971,804].

Regarding claims 72, 86 and 90, Gallagher et al. disclose a system (figures 2, 3a-c and 4a-e) comprising:

- a carrier including a carrier enclosure (18, figure 2), wherein the carrier enclosure has a plurality of server blade (figure 3c) receiving locations to receive a plurality of server blades (figure 5a-5h), wherein each of the server blade including;
- a blade enclosure with two opposing side faces, a front edge face, a rear edge face, an upper edge face and a lower edge face (figures 5a-5b);
- wherein the blade enclosure includes at least one ventilation opening on each of the front and rear edge faces to permit a flow of cooling air through the blade enclosure between the front and rear edge faces (figures 3b, 4d, figure 5g has shown openings in the front face of the enclosure and 12a, 12b has shown openings in the rear face of the enclosure);

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- wherein the blade enclosure is configured to slideably mount into the carrier (column 5, lines 21-30);
- wherein the blade enclosure includes at least one connection accessible externally to the blade enclosure and located on the rear edge face (figures 12a, 12c); and
- wherein the at least one server blade receiving location of the carrier enclosure is configured to receive the server blade (figures 3c and 4c).

Regarding claim 73, Gallagher et al. disclose the carrier enclosure being further operable to receive at least one power supply operable to supply direct current DC (38), at least one switch (column 6, lines 8-19) operable to distribute information signals; and at least one service processor (column 5, lines 49-63) operable to distribute system management signals.

Regarding claims 74-75, Gallagher et al. further disclose a connection mid plane (30, figure 4c) carrying at least one conductive path interconnecting at least one carrier connector for carrying power, information signals, and system management signals (figure 13b).

Regarding claims 76-77, Gallagher et al. disclose wherein the mid plane comprises a first face and a second face; wherein the at least one server blade receiving location is located at the first face of the mid plane; and wherein a location for receiving the at least one power supply (figure 4d). In the figure 4d, it appears that the switch connected with the power supply (column 6, lines 8-19) should mount at the

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second face of the mid plane, because the power supply is mounted at the second face of the mid plane.

Regarding claims 80-81, Gallagher et al. disclose the carrier enclosure further comprises two power supply receiving locations configured to receive a field replaceable power supply (figure 4d, column 1, lines 40-55).

Regarding claim 87, Gallagher et al. further disclose wherein the carrier system having at least one blade enclosure being provided electromagnetic shielding (column 8, lines 53-55).

Regarding claim 88, Gallagher et al. further disclose at least one of the sever blade receiving locations includes at least one guide (261) for guiding the server blade into the server blade receiving location (figure 12a).

Regarding claim 89, Gallagher et al. disclose the connection mid plane being a passive component.

Regarding claim 91, Gallagher et al. further disclose at least one indicator connecting with the board of the server blade to indicate the status of the board being coupled to the carrier system (figures 5g-5h, column 9, lines 1-5).

Regarding claims 92-93, Gallagher et al. disclose the carrier being configured as a racking system (figure 4a).

Regarding claim 94, Gallagher et al. disclose wherein the blade enclosure seems a narrow elongate form (figures 4c, 5a).

Regarding claim 95, Gallagher et al. further disclose the opposing side faces and the upper and lower edge faces having substantially a same length; the front and rear

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edge faces having a length substantially equivalent to the width of the opposing side faces; and the front and rear edge face having a width substantially the same as the width of the upper and lower edge faces (figures 5a-5b).

Regarding claim 96, Gallagher et al. disclose wherein the mid plane comprises at least one ventilation opening (250a-250c, figure 12b).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 79 and 82-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gallagher et al. in view of Derrico et al. [US 2002/0078290].

Regarding claim 79, Gallagher et al. disclose wherein the mid plane comprises a first face and a second face (figure 4d); wherein the carrier comprises at least one server blade receiving location with an opening (figure 3b and 4a) in the first face and wherein the connection plane includes at least one connection plane connector (254a, 254b, figure 12b-c) for each server blade receiving location and at least one conductive path for interconnecting the at least one connection plane connector.

Gallagher et al. disclose the instant claimed invention except for the second face of the mid plane being connected with a field replaceable module.

Derrico et al. disclose the connection mid plane comprising a first face and a second face; wherein the carrier comprises at least one server blade receiving location with an opening in the first face and at least one server blade receiving location with an opening in the second face for receiving a field replaceable module; and wherein the connection plane includes at least one connection mid plane connector for each server blade receiving location and at least one conductive path for interconnecting the at least one connection plane connector (figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use to add a replaceable module with the second mid plane of the carrier of Gallagher et al., as suggested by Derrico et al., for the purpose of providing additional modules can be used with the server system.

Regarding claims 82-85, Gallagher et al. disclose the instant claimed invention except for at least one support module receiving location configured to receive a field replaceable such as, switch, service processor module or combination between a switch and service processor module.

Derrico et al. further disclose the carrier system having two support module receiving locations configured to receive a field replaceable switch, processor and server blade (figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the at least one support design of Derrico et al. in the carrier system of Gallagher et al., for the purpose of providing structure to mount the replaceable modules in the carrier system.

***Response to Arguments***

5. Applicant's arguments with respect to claims 72-77 and 79-96 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

1/19/06  
**Hung Bui**  
**Art Unit 2841**

IBP  
for  
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